

Spinal Cord Tumors

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Introduction: To study the relative frequency of primary spinal cord tumors and their features in Indian populations and comparison with other reports.

Methods: Data of primary spinal cord tumors operated between 2009 and 2016 was collected and analyzed.

Results: Of the 224 patients operated at our center, 104 (45.83) patients were male and 120 (54.17) were females. The mean age at surgery was 45.09 years (range 5 years 11 months to 87 years). Of these tumors, 120 cases were intradural extramedullary (53.64%), 36 cases were intramedullary (15.63%), 18 cases (8.34%) were epidural tumors and 50 patients (22.40%) were dumbbell tumors. The histopathological diagnosis was 114 schwannomas, 27 neurofibromas, 21 meningiomas, 15 ependymomas, 8 hemangiomas, 7 hemangioblastomas, 7 chordomas, 6 astrocytomas, 4 lipomas and 15 tumors of various other diagnoses including very rare malignant peripheral nerve sheath tumor transformed from ganglioneuroma developed 30 years after radiation (19th reported case). Outcome analysis was also done and 87.5% patients described good to excellent outcome. As against most Non-Asian studies, relative frequency of nerve sheath tumors (62.5%) appears higher than meningiomas (14.17%).

Conclusions: This is the largest single institutional review for spinal cord tumors in Indian population with demographic, histopathological and outcome analysis. Formation of spinal cord tumor registry is important to ascertain the demographic variations amongst different populations to indicate etiological agents.